

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS : Epstein et al.

SERIAL NUMBER : 10/718,833

EXAMINER : Jon Benjamin Ashen

FILING DATE : November 21, 2003

ART UNIT : 1635

FOR : MULTIVALENT APTAMER THERAPEUTICS WITH IMPROVED  
PHARMACODYNAMIC PROPERTIES AND METHODS OF  
MAKING AND USING THE SAME

**Mail Stop Amendment**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

**TRANSMITTAL LETTER**

Transmitted herewith for filing in the present application are the following documents:

1. Supplemental Information Disclosure Statement (2 pages), in duplicate;
2. Modified Form 1449/PTO (3 pages), in duplicate;
3. Copies of Cited References: B4-10; C15-65; and
4. Return Postcard.

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617) 542-6000, Boston, Massachusetts.

The Commissioner is authorized to charge any fees that may be due, or to credit any overpayment, to the undersigned's account, Deposit Account No. 50-0311 Ref. No. 23239-541.

A duplicate copy of this transmittal letter is enclosed herewith.

Respectfully submitted,

Ivor R. Elrifi, Reg. No. 39,529

Heidi A. Erlacher, Reg. No. 45,409

Attorney(s) for Applicants

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Date: November 17, 2005

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANTS : Epstein et al.

SERIAL NUMBER : 10/718,833

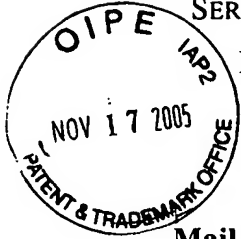
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**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, Applicants hereby make of record the documents listed on the attached modified Form PTO-1449, as well as copies of the listed documents.

This Supplemental Information Disclosure Statement is being filed before the mailing date of a first Office Action based on the merits in the above-identified case. Accordingly, no fee or certification is believed required. By the waiver of 37 CFR 1.98(a)(2)(i) copies of the U.S. Patents A24-42 are not submitted.

It is respectfully requested that the Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims, and sign the enclosed form PTO-1449 to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application.

By submitting this Supplemental Information Disclosure Statement, the Applicants make no representation that: (1) a search has been performed, of the extent of any search performed, or that more relevant information does not exist; (2) the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b); and (3) the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

APPLICANTS: Epstein et al.  
U.S.S.N.: 10/718,833

Notwithstanding any statements by the Applicants, the Examiner is urged to form his/her own conclusion regarding the relevance of the cited information. An early and favorable action is hereby requested.

Please charge any fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-0311, Reference No. 23239-541.

Respectfully submitted,



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November 17, 2005

TRA 2094330v.1

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PTO/SB (12-97)

Approved for use through 9/30/00. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Modified Form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

<b>Application Number</b>	10/718,833
<b>Filing Date</b>	November 21, 2003
<b>First Named Inventor</b>	Epstein
<b>Group Art Unit</b>	1635
<b>Examiner Name</b>	Jon Benjamin Ashen
<b>Attorney Docket Number</b>	23239-541

**U.S. PATENT DOCUMENTS**

Exam Initials	Cite No.	U.S. Patent Document No.	Issue Date	Name of Patentee(s) or Applicant(s)	Class	Sub Class	Filing Date if Appropriate
	*A24	3,710,795	01/16/73	Higuchi et al.			
	*A25	4,683,195	07/28/87	Mullis			
	*A26	4,935,363	06/19/90	Brown et al.			
	*A27	4,959,309	9/25/90	Dattagupta et al.			
	*A28	5,070,010	12/03/91	Hsu			
	*A29	5,262,564	11/16/93	Kun et al.			
	*A30	5,338,671	8/16/94	Scalice et al.			
	*A31	5,459,015	10/17/95	Janjic et al.			
	*A32	5,503,978	4/12/96	Schneider et al.			
	*A33	5,635,615	06/03/97	Allen et al.			
	*A34	5,654,151	08/05/97	Allen et al.			
	*A35	5,723,323	03/03/98	Kauffman et al.			
	*A36	5,763,173	06/09/98	Gold et al.			
	*A37	5,773,598	06/30/98	Burke et al.			
	*A38	5,789,157	08/04/98	Jensen et al.			
	*A39	5,861,254	01/19/99	Schneider			
	*A40	6,013,443	01/11/00	Heilig et al.			
	*A41	6,020,130	02/01/00	Gold et al.			
	*A42	6,458,559	10/01/02	Shi et al.			

**U.S. PUBLISHED APPLICATION DOCUMENTS**

Exam Initials	Cite No.	U.S. Published Application No.	Published Date	Name of Patentee(s) or Applicant(s)	Class	Sub Class	Filing Date if Appropriate

FOREIGN PATENT DOCUMENTS						
Exam Initials	Cite No.	Foreign Patent Office	Patent Document Number	Name of Patentee(s) or Applicant(s)	Date of Publication	Translation Yes No
	B4	WO	89/06694	TRUSTEES OF THE UNIV. OF PENNSYLVANIA	07/27/89	
	B5	WO	91/14436	ISIS PHARMACEUTICALS, INC.	10/03/91	
	B6	WO	92/05285	FRED HUTCHINSON CANCER RESEARCH CENTER	04/02/92	
	B7	WO	92/14842	GILEAD SCIENCES, INC.	09/03/92	
	B8	WO	92/14843	GILEAD SCIENCES, INC.	09/03/92	
	B9	EP	0 592 035 B1	JOHNSON & JOHNSON CLINICAL DIAGNOSTICS, INC.	04/13/94	
	B10	UK	2 183 661 A	MARK BALLIVET ET AL.	06/10/87	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
	C15	Andrake et al. <i>Proc. Natl. Acad. Sci. USA</i> , 85:7942-7946 (1988)
	C16	Beaudry et al. <i>Science</i> , 257:635-641 (1992)
	C17	Burke et al. <i>RNA</i> , 4:1165-1175 (1998)
	C18	Carey et al. <i>Biochem.</i> , 22(11):2601-2610 (1983)
	C19	Chen et al. <i>Biochem.</i> , 16(15):3310-3315 (1977)
	C20	Cohen et al. <i>Proc. Natl. Acad. Sci. USA</i> , 63:458-464 (1969)
	C21	Davis et al. <i>Meth. Enzymol.</i> , 267:302-314 (1996)
	C22	Debouck et al., <i>Biol. Physiol. Of the Blood-Brain Barrier In Vitro</i> , Couraud and Scherman eds., Chapter 23, pp. 143-146 (1996)
	C23	Ellington et al. Abstracts of papers presented at the 1990 meeting on RNA Processing, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, Pg. 84 (1990)
	C24	Fitzwater et al. <i>Meth. Enzymol.</i> , 267:275-301 (1996)
	C25	Frohman et al. <i>Proc. Natl. Acad. Sci. USA</i> , 85:8998-9002 (1988)
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	C27	Greenwald et al. <i>J. Org. Chem.</i> , 60:331-336 (1995)
	C28	Harris et al. <i>Nature</i> , 2:214-221 (2003)
	C29	Joyce et al. <i>Nucl. Acids Res.</i> , 17(2):711-722 (1989)
	C30	Joyce <i>Gene</i> , 82:83-87 (1989)
	C31	Kacian et al. <i>Proc. Natl. Acad. Sci. USA</i> , 69:3038-3042 (1972)
	C32	Kadonaga et al. <i>Proc. Natl. Acad. Sci. USA</i> , 83:5889-5893 (1986)
	C33	Kellogg et al. <i>BioTechniques</i> , 16(6):1134-1137 (1994)
	C34	Kinzler et al. <i>Nucl. Acids Res.</i> , 17(10):3645-3653 (1989)
	C35	Kinzler et al. <i>Mol. Cell. Biol.</i> , 10(2):634-642 (1990)
	C36	Kramer et al. <i>J. Mol. Biol.</i> , 89:719-736 (1974)
	C37	Lestienne et al. <i>Biochimie</i> , 65:49-52 (1983)
	C38	Levisohn et al. <i>Proc. Natl. Acad. Sci. USA</i> , 60:866-872 (1968)

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Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
	C39	Levisohn et al. <i>Proc. Natl. Acad. Sci. USA</i> , 63:805-811 (1969)
	C40	Ma et al. <i>Cell</i> , 51:113-119 (1987)
	C41	Maniatis et al. <i>Molecular Cloning: a Laboratory Manual</i> , Cold Spring Harbor Laboratory, NY pg.118 (1982)
	C42	Maniatis et al. <i>Science</i> , 236:1237-1245 (1987)
	C43	Miele et al. <i>J. Mol. Biol.</i> , 171:281-295 (1983)
	C44	Mills et al. <i>Science</i> , 180:916-927 (1973)
	C45	Mills et al. <i>Proc. Natl. Acad. Sci. USA</i> , 58:217220 (1967)
	C46	Min et al. <i>Nucl. Acids Res.</i> , 16(11):5075-5088 (1988)
	C47	Muesing et al. <i>Nature</i> , 313:450-458 (1985)
	C48	Mullis et al., <i>CSHS Quant. Biol.</i> , LI:263-273 (1986)
	C49	Oliphant et al. <i>Meth. Enzymol.</i> , 155:568-582 (1987)
	C50	Oliphant et al. <i>Nucl. Acids Res.</i> , 16(15):7673-7683 (1988)
	C51	Oliphant et al. <i>Gene</i> , 44:177-183 (1986)
	C52	Oliphant et al. <i>Mol. Cell. Biol.</i> , 9:2944-2949 (1989)
	C53	Orgel <i>Proc. R. Soc. Lon. B</i> , 205:435-442 (1979)
	C54	Ou et al. <i>Science</i> , 239:295-297 (1988)
	C55	Robertson et al. <i>Nature</i> , 344:467-468 (1990)
	C56	Romaniuk et al. <i>Biochem.</i> , 26(6):1563-1568 (1987)
	C57	Saffhill et al. <i>J. Mol. Biol.</i> , 51:531-539 (1970)
	C58	Sambrook et al. <i>Molecular Cloning: A Laboratory Manual</i> , Cold Spring Harbor, NY, Second Ed., Section 8.9-8.10 (1989)
	C59	Singleton et al. <i>Dictionary Microbiol. Mol. Biol.</i> , Wiley & Sons, New York, NY, 2nd ed. p. 493 (1978)
	C60	Szostak <i>A Structure and Activity of Ribozymes</i> , Redesigning the Molecules of Life, (SA Benner ed.) Springer-Verlag Berlin Heidelberg, pp. 87-113 (1988)
	C61	Tanchou et al. <i>Aids Res. Hum. Retroviruses</i> , 10(8):983-993 (1994)
	C62	Thiesen et al. <i>Nucl. Acids Res.</i> , 18(11):3203-3209 (1990)
	C63	Tuerk et al. <i>Science</i> , 249:505-510 (1990)
	C64	Uhlenbeck et al. <i>J. Biomol. Struct. Dynamics</i> , 1:539-552 (1983)
	C65	Watson et al. <i>Molecular Biology of the Gene</i> , Benjamin/Cummings Publishing Co., Inc. California, pp. 267,295,323,361,394,396,397 and 405 (1987)

\* By the waiver of 37 CFR 1.98(a)(2)(i) copies of the U.S. Patents A24-42 are not submitted.

Examiner Signature		Date Considered	
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.